A STOCK ASSESSMENT OF PERMIT, *TRACHINOTUS FALCATUS*, IN FLORIDA WATERS

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Executive summary

Little is known on the biology of permit. Spawning is thought to occur offshore during the summer. After spending an unknown amount of time in the plankton, larvae settle primarily in exposed sandy beach habitats where they feed on benthic prey. Adult permit are associated with channels, holes, sand flats, and around reefs. No information is available on permit growth, but they are known to reach sizes over 1 m (>50 lbs.). Preliminary data indicate that permit mature at about 440 mm FL (17.5").

Commercial landings of permit in Florida occurred primarily on the Gulf coast (80% of landings). Gill nets were the most important gear used by the commercial fishery, although trammel nets and hook and line also hade significant landings. Statewide commercial landings peaked in 1991 at nearly 200,000 pounds. The mean size of fish captured on the Gulf coast (257 mm fork length) was less than that of fish captured on the Atlantic coast (300 mm FL). Little data are available on the recreational permit fishery in Florida. Recreational landings have varied between about 40,000 and 400,000 pounds in the last five years but these data are regarded as unreliable because they are based on low numbers of MRFSS intercepts. The mean size of permit landed by anglers was about 322 mm FL. Most permit landed in both the commercial and recreational fisheries were immature based on the preliminary estimate of size at maturity.

At present, there are little data available with which to assess the condition of the permit stock(s). A life history study of permit is in progress by the Florida Marine Research Institute to address the need for more information. Catch-per-unit-effort has been stable and a recent decline in landings appears related to a decrease in effort. The constitutional amendment to regulate inshore nets has impacted landings on both coasts. Commercial landings in 1995 showed a 40% decrease from 1994 landings, and were the lowest since 1985. Landings in 1996 are expected to be lower than 1995 since the net amendment will be in effect for the entire year.

I. BIOLOGICAL CHARACTERISTICS

Data Sources

There is little published information on permit, *Trachinotus falcatus*. Data used in this report were derived from faunal surveys published by a variety of authors, and from unpublished data collected by Florida Marine Research Institute (DEP/FMRI) personnel.

Morphometrics

A relationship of length to weight from 60 permit collected from Tampa Bay (109-457 mm fork length (FL)) was:

$$\text{Weight (g)} = 2.61 \times 10^{-5} (\text{FL in mm})^{3.00}$$

Conversions among various types of length measures are:

$$FL = 12.468 + 0.754(TL)$$
$$TL = -12.038 + 1.314(FL)$$

$$TL = -6.951 + 1.430(SL)$$
$$SL = 9.785 + 0.685(TL)$$

$$FL = 3.556 + 1.090(SL)$$
$$SL = -1.8948 + 0.913(FL)$$

Stock Distribution

Permit are confined to the western Atlantic from Massachusetts to southern Brazil and are found throughout the West Indies and in Bermuda (Berry and Smith-Vaniz 1978). No data on existence or distribution of permit sub-populations are available.

Habitat Requirements and Distribution Patterns

Little is known about the habits of larval permit. Spawning is thought to occur in nearshore waters where pelagic eggs and larvae occur (Fields 1962, Finucane 1969). Fields (1962) reported that larvae found off Georgia and the east coast of Florida were collected proximate to the Gulf Stream.

Juveniles (10 - 100 mm SL) are generally found along exposed sandy beaches where they feed on benthic invertebrates. In northeast Gulf and south Atlantic waters, juveniles recruit to the beaches in May and June. They remain in these waters through October or November (Springer

and Woodburn 1960, Tagatz and Dudley 1961, DeSylva et al. 1962, Fields 1962, Cupka 1972, Anderson et al. 1977, Naughton and Saloman 1978, Peters and Nelson 1987). Salinities and temperatures reported from these waters range from 17 to 35‰ and 14 to 38°C. In west central Florida, permit are collected year round along exposed sandy beaches and at polyhaline estuarine locations (Springer and Woodburn 1960, Finucane 1969, Carr and Adams 1973, FMRI Fisheries Independent Monitoring Program, FMRI Pompano Project). Recruitment peaks in June and July with a secondary peak in October.

Little information exists on adult habitat requirements and distribution patterns. Adults are found associated with channels, holes, sand flats, and around reefs (Berry and Smith-Vaniz 1978).

Food Habits

Larval permit probably feed on small invertebrate plankton; however, no published reports list prey items from this life history phase. Juveniles are initially planktivorous and feed on copepods, amphipods, mysids, post larval shrimp, and larval fish (Fields 1962, Finucane 1969, Carr and Adams 1973). At sizes greater than 35 mm SL, they shift to benthic prey such as mole crabs (*Emerita*), coquina clams (*Donax*), flatworms, gastropods, and sessile barnacles. Permit can feed on hard prey items that they crush using pharyngeal plates. Adults feed on bivalves, barnacles, gastropods, echinoids, pelecypods, hermit crabs, and porcellanid crabs (Randall 1967, Finucane 1969)

Predators

No information exists on predators of any life history stage of permit. Juveniles inhabiting exposed sandy beaches are probably subject to avian and piscivore predation, although an advantage of using this habitat is that physical disturbance caused by waves may act to hinder potential predators (Hedgepeth 1957). Adult permit can reach large sizes that should limit potential predators to only large marine carnivores (e.g. sharks and dolphins).

Reproductive Life History

Permit spawn in the late spring and early summer. Small juveniles recruit to exposed sandy beach habitats during this period. In west central Florida waters, a second pulse of small juvenile permit occurs in the fall indicating a secondary spawning event. Size at maturity is unknown. An examination of 62 permit (109- 457 mm FL) captured in Tampa Bay by FMRI personnel suggests that gonadal development does not occur until at least 440 mm FL (17.3"). No published information is available on the fecundity of permit.

Growth Patterns

No published information exists on permit growth. Sportfishing records show that permit

can attain a size of 1.1 m FL (23 kg) (Robins 1992). An age and growth study of permit conducted by FMRI staff is in progress.

II. FISHERY CHARACTERISTICS

Data Sources

Sources of commercial landings statistics were the National Marine Fisheries Service's General Canvas for landings information prior to 1986 and Florida's Marine Fisheries Information System, also known as the trip ticket system, for landings after 1986. Trip tickets include measures of effort in addition to pounds landed. Trip Ticket data included in the assessment were those received by FMRI by April 25, 1996 (Batch 411). Information on the length composition of the commercial catch was obtained from the Trip Interview Program of FMRI. Estimates of recreational permit landings and length frequencies were obtained from the Marine Recreational Fishery Statistics Survey (MRFSS) of the National Marine Fisheries Service.

Commercial Harvest

The statewide commercial landings of permit increased steadily from 1981 and reached a peak in 1991 at nearly 200,000 pounds. Since then, landings have decreased each year, dropping to 50,000 pounds in 1995 (Tables 1a and 1b, Figure 1). Greater than 80% of permit landings were from the Gulf coast during 1981-1995 (Figure 2). Landings showed only minor seasonal variation on the Atlantic coast with the highest landings generally occurring in mid-summer and occasionally in December. Landings on the Gulf coast were greatest during the summer and fall (Table 2).

Information on landings by gear types has been available since 1991. Gill nets have been the dominant gear type for landing permit. Permit have also been caught in significant quantities by trammel net and by hook and line (Table 3).

On the Gulf coast between about 110-210 SPL license holders were responsible for all annual landings reported in excess of 100 pounds. The Atlantic coast fishery consisted of far fewer permit-landing license-holders, with fewer than 50 landing 100 pounds or more each year (Table 4).

Landings of other species made in association with permit included most of the marine fishes in Florida that are vulnerable to gill nets. Those occurring on greater than 25% of the trips on which permit were landed include: pompano, sheepshead, striped mullet, spotted seatrout, Spanish mackerel, crevalle jack, and bluefish. Others that occurred less frequently were catfish, croaker, flounders, ladyfish, mangrove snapper, and spot (Table 5).

Commercial landings consisted mainly of permit between 200-400 mm FL (Figures 3a and 3b). The length frequencies show two relatively clear modes, one at about 235 mm and the other at about 320 mm. These modes may represent age-1 and age-2 fish, although without ageing, this is only speculation. The length frequency obtained from purse seine collections in Tampa Bay by the Fisheries Independent Monitoring Program of FMRI show similar modes and also show a mode at about 100 mm FL that may represent the age-0 fish (Figure 3c). The mean size of permit landed on the east coast (300 mm FL) is larger than the mean size of permit landed on the west coast (257 mm FL).

Recreational Harvest

Recreational statistics for permit are probably quite unreliable because of the low number of intercepts made with permit anglers. During the early-mid 1990's when intercepts increased to about 20 anglers per year on the Atlantic coast and 30 anglers per year on the Gulf coast estimated harvest was 0-2,700 fish on the Atlantic coast and 7,000-100,000 fish on the Gulf coast (Table 1, Figures 4a and 4b). Landings were greatest in southwest Florida (Figure 5). The sizes of permit measured by the MRFSS during the 1990's ranged from 13-28" (N=5) on the Atlantic coast and 8-35" fork length (N=76) on the Gulf coast (Tables 6a and 6b).

On the Atlantic coast all recreational anglers interviewed by the MRFSS kept less than 2 fish, except for two anglers that kept 2 permit each. More than 95% of the anglers interviewed on the Gulf coast kept 3 fish or less although three anglers kept more than 10 fish (Tables 7a and 7b).

Combined Harvest

The combined harvest statistics are unreliable because of the unreliability of the estimate of their recreational component. Estimates from the 1990's are probably more reliable because of the increase in recreational intercept interviews during this time period. The combined annual harvest of permit was less than 300,000 pounds in 1990-1995, except in 1991 when the combined harvest was 600,000 pounds (Table 1). Both commercial and recreational landings, and therefore combined harvest, were highest on the Gulf coast.

III. ASSESSMENT

Trends in abundance

Catch-per-unit-effort (CPUE) is often used as a relative index of abundance of fishes. These data are available for permit from the Marine Recreational Fishery Statistics Survey and the Florida Marine Fisheries Information System. The recreational index is the mean number of permit caught per hour by anglers who reported catching at least one permit or who stated they were targeting permit. The index was standardized by GLM procedures for county, month,

number of anglers, and numbers of hours fished. The commercial index is the mean pounds of permit landed per trip, standardized by GLM procedures for county and month.

In the following discussion of recreational CPUE, we only consider the estimates for the years 1991-1995 because the estimates for the prior years were judged to be unreliable due to the low number of intercepts. On the east coast, CPUE varied without apparent trend between 0.026-0.090 fish per hour with the highest and lowest values occurring in 1994 and 1995, respectively (Figure 6). On the west coast, estimates varied between 0.107-0.509, and a trend of decreasing CPUE is suggested (Figure 6). However, CPUE was not significantly different among years for either coast (Atlantic coast, F=1.24 d.f.=9, 65; Gulf coast, F=1.65, d.f.=13, 202).

Commercial CPUE showed little variation on the east coast during the period 1986-1995 (Figure 6). CPUE was more variable on the west coast, varying between 5.9-9.2 with the highest value occurring in 1995. Changes in CPUE in the recreational and commercial fisheries do not indicate any consistent patterns that would suggest significant changes in the abundance of permit.

Mortality Estimates, Spawning Potential Ratio, Yield-per-Recruit

We lack basic life history information such as growth rates or age structure that is required to conduct in-depth analyses such as the estimation of mortality rates, yield-per-recruit, or spawning potential ratios. The lack of larger individuals (>500 mm FL) in the fishery-independent samples suggests that fishing mortality is impacting the permit populations, although the lack of larger individuals may also simply be the result of selectivities of the gear used or small sample sizes.

Present and potential future condition of the stock

At present, there are little data available with which to assess the condition of the stock. An ongoing life history study being conducted by FMRI staff will provide the life history information required to conduct a more comprehensive assessment within the next year. At this time, the permit stock appears stable. The decline in landings from 1991 to 1994 may indicate a decrease in abundance of permit, but this is in contrast to observations of CPUE. The decline in landings appears to be associated with a decrease in fishing effort (in numbers of trips) for permit (Tables 1a and 1b).

One potentially important fact that has become apparent in the analyses is that most permit landed are sexually immature. If the length-frequency distributions of landed fish are representative of the commercial and recreational fisheries, and if permit do not mature until 440 mm FL (as preliminary data show), then a majority of the commercial and recreational landings are immature fish. It is possible that a moderate fishing mortality rate could severely affect spawning stock biomass.

IV. MANAGEMENT

Historically, fishermen have been subject to a 20" maximum size limit for permit, with an allowance of two fish over 20" for recreational fishermen. New regulations enacted on January 1, 1996 provide 10" minimum/20" maximum size limits for both the commercial and recreational fisheries. Additionally, recreational fishermen are subject to a 10 fish daily bag limit, with an allowance for 1 fish over 20". Bag limit analyses indicate the bag limit has no effect on east coast landings but may be reducing west coast landings by a small amount.
We have concern that there is little protection for juvenile permit. Future regulations may need to address the protection of juveniles if spawning biomass is shown to be declining in future assessments.

The constitutional amendment to regulate inshore nets appears to have impacted commercial permit landings on both coasts. Commercial landings in 1995 showed a decrease of about 40% from 1994 landings, and were at the lowest level since 1985. Landings in 1996 are expected to be lower than 1995 landings since the net amendment will be in effect for the entire year.

Literature Cited

Anderson, W. D., J. K. Dias, R. K. Dias, D. M. Cupka, and N. A. Chamberlain. 1977. The macrofauna of the surf zone off Folly Beach, South Carolina. NOAA Tech. Rep. NMFS SSRF-704:i-iv+1-23.

Berry, F. H., and W. F. Smith-Vaniz. 1978. Carangidae, FAO Species Identification Sheets for Fishery Purposes. Western Central Atlantic. ed. W. Fisher, FAO, Rome. Volume II.

Carr, W. E. and C. A. Adams. 1973. Food habits of juvenile marine fishes occupying seagrass beds in the estuarine zone near Crystal River, Florida. Trans. Am. Fish. Soc. 102:511-540.

Cupka, D. M. 1972. A survey of the ichthyofauna of the surf zone in South Carolina. South Carolina Wildl. Mar. Res. Dept., Tech. Rep. No. 4. 19 pp.

de Sylva, D. P., F. A. Kalber, and F. A. Shuster. 1962. Fishes and ecological conditions in the shore zone of the Delaware River estuary, with notes on other species collected in deeper water. Univ. Delaware Mar. Lab. Information Ser., Publ. #5. 164 pp.

Fields, H. M. 1962. Pompanos (Trachinotus spp.) of south Atlantic coast of the United States. U.S. Fish Wildl. Serv., Fish. Bull. 62:189-222.

Finucane, J. H. 1969. Ecology of pompano (Trachinotus carolinus) and the permit (T. falcatus) in Florida. Trans. Amer. Fish. Soc. 98:478-486.

Hedgepeth, J. W. 1957. Sandy beaches. Geol. Soc. Amer. Memoir 67, 1:587-608.

Naughton, S. P. and C. H. Saloman. 1978. Fishes of the nearshore zone of St. Andrew Bay, Florida, and adjacent coast. N.E. Gulf Sci., 2:43-55.

Peters, D. J. and W. G. Nelson. 1987. The seasonality and spatial patterns of juvenile surf zone fishes of the Florida east coast. Flor. Sci. 50:85-99.

Randall, J. E. 1967. Food habits of reef fishes of the West Indies. Stud. Trop. Oceanogr., Univ. Miami. 5:665-847.

Robins, C. R. 1992. American Nature Guides Saltwater Fish. Smithmark Publ., Inc., New York. 192 pp.

Springer, V. G. and K. D. Woodburn. 1960. An ecological study of the fishes of the Tampa Bay area. Florida State Bd. Cons. Mar. Lab. Prof. Pap. Ser. No. 1, 104 pp.

Tagatz, M. E., and D. L. Dudley. 1961. Seasonal occurrence of marine fishes in four shore habitats near Beaufort, N. C., 1957-60. U. S. Dept. Interior, Fish and Wildl. Ser., Spec. Sci. Rept.-Fisheries No. 390, 19 pp.

List of Tables

Table 1a. Recreational and commercial landings information for Permit in Florida waters (Atlantic Coast).

SPECIES: Trachinotus falcatus Permit

COAST : ATLANTIC

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Number of Intercepts	.	.	.	1	1	1	4	3	2	.	7	17	24	14	19
Number of Fish Caught	.	.	.	778	2,963	1,473	2,115	4,857	3,538	.	4,069	3,461	3,201	4,883	2,735
Number of Fish Released Alive	.	.	.	0	0	0	0	0	0	.	4,069	863	2,691	2,095	0
Number of Fish Harvested	.	.	.	778	2,963	1,473	2,115	4,857	3,538	.	0	2,598	509	2,788	2,735
Average Number of Fish Caught/Trip	.	.	.	1.000	1.000	1.000	0.250	0.667	1.000	.	0.286	0.176	0.208	0.429	0.158
Estimated Number of Directed Trips	.	.	.	778	2,963	1,473	8,458	7,285	3,538	.	14,242	19,615	15,363	11,394	17,322
Average Number of Fish Kept/Trip	.	.	.	1.000	1.000	1.000	0.250	0.667	1.000	.	0.000	0.118	0.042	0.286	0.158
Ratio Kept : Total	.	.	.	1.00	1.00	1.00	1.00	1.00	1.00	.	0.00	0.75	0.16	0.57	1.00
Average Number of Fish Caught/Angler	.	.	.	1.000	0.250	1.000	0.250	0.500	1.000	.	0.286	0.176	0.208	0.429	0.158
Estimated Number of Anglers	.	.	.	778	11,853	1,473	8,458	9,714	3,538	.	14,242	19,615	15,363	11,394	17,322
Average Number of Fish Caught/Hour	.	.	.	0.200	0.036	0.250	0.042	0.097	0.250	.	0.059	0.036	0.043	0.090	0.026
Estimated Number of Hours	.	.	.	3,892	82,971	5,892	50,749	49,957	14,152	.	69,354	95,423	74,358	54,253	103,448
Average Number of Fish Kept/Hour	.	.	.	0.200	0.036	0.250	0.042	0.097	0.250	.	0.000	0.025	0.010	0.068	0.026
Average Weight (lbs) of Fish Examined	.	.	.	0.882	0.441	3.748	.	20.062	1.984	.	.	7.496	.	3.013	2.205
Number of Fish Weighed	.	.	.	1	1	1	.	1	2	.	.	1	.	3	1
Estimated Recreational Landings (lbs)	.	.	.	686	1,307	5,520	.	97,437	7,020	.	.	19,475	.	8,401	6,030
Estimated Commercial Landings (lbs)	7,503	9,175	12,452	7,168	32,162	10,334	12,006	12,171	13,936	11,022	21,658	18,719	11,000	11,987	7,025
Estimated Total Landings (lbs)	.	.	.	7,854	33,469	15,854	.	109,608	20,956	.	.	38,194	.	20,388	13,055
Landings Ratio (Rec/Comm)	.	.	.	0.10	0.04	0.53	.	8.01	0.50	.	.	1.04	.	0.70	0.86
Percent Commercial	.	.	.	91.3%	96.1%	65.2%	.	11.1%	66.5%	.	.	49.0%	.	58.8%	53.81%
Number of Commercial Trips	.	.	.	.	.	609	814	715	782	824	1,221	1,184	861	904	340
Average Number of Pounds/Trip	.	.	.	.	.	16.97	14.75	17.02	17.82	13.38	17.74	15.81	12.78	13.26	20.66

Data Sources: Recreational catch estimates were taken from the National Marine Fisheries Service's Marine Recreational Fisheries Statistical Surveys. Commercial landings data were taken from the National Marine Fisheries Service, Southeast Fisheries Science Center (1981-1985) and from the Florida Department of Environmental Protection's Marine Fisheries Information System (1986-1995 through Trip Ticket Batch 411).

Table 1b. Recreational and commercial landings information for Permit in Florida waters (Gulf Coast).

SPECIES : Trachinotus falcatus Permit

COAST : GULF

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Number of Intercepts	.	7	3	3	4	7	13	8	18	17	30	32	42	33	25
Number of Fish Caught	10,522	6,957	16,627	6,545	2,143	3,113	10,136	1,726	24,022	45,731	124,375	37,774	49,906	22,296	16,130
Number of Fish Released Alive	9,730	2,472	2,842	0	419	2,362	6,012	0	15,848	45,731	23,906	22,824	20,981	4,535	9,454
Number of Fish Harvested	792	4,486	13,784	6,545	1,724	751	4,124	1,726	8,173	0	100,469	14,951	28,925	17,760	6,676
Average Number of Fish Caught/Trip	.	0.857	1.000	1.000	0.500	0.714	1.154	0.125	1.222	0.706	3.133	1.625	1.429	0.909	0.720
Estimated Number of Directed Trips	.	8,117	16,627	6,545	4,286	4,358	8,785	13,806	19,654	64,785	39,694	23,246	34,934	24,525	22,403
Average Number of Fish Kept/Trip	.	0.714	0.667	1.000	0.250	0.286	0.308	0.125	0.389	0.000	2.433	0.438	0.929	0.758	0.320
Ratio Kept : Total	0.08	0.64	0.83	1.00	0.80	0.24	0.41	1.00	0.34	0.00	0.81	0.40	0.58	0.80	0.41
Average Number of Fish Caught/Angler	.	0.857	1.000	0.833	0.500	0.393	1.013	0.125	0.907	0.588	1.994	1.406	1.274	0.672	0.720
Estimated Number of Anglers	.	8,117	16,627	7,855	4,286	7,924	10,008	13,806	26,473	77,742	62,361	26,862	39,178	33,192	22,403
Average Number of Fish Caught/Hour	.	0.199	0.389	0.542	0.096	0.051	0.364	0.016	0.199	0.233	0.509	0.380	0.234	0.107	0.211
Estimated Number of Hours	.	34,947	42,754	12,084	22,360	60,653	27,861	110,448	120,774	196,252	244,526	99,413	212,882	207,761	76,591
Average Number of Fish Kept/Hour	.	0.175	0.306	0.542	0.063	0.010	0.042	0.016	0.046	0.000	0.399	0.130	0.138	0.069	0.079
Average Weight (lbs) of Fish Examined	.	.	0.992	11.464	.	16.865	15.359	1.984	15.212	.	4.292	3.026	1.543	9.492	5.695
Number of Fish Weighed	.	.	2	3	.	2	3	1	4	.	47	11	4	9	6
Estimated Recreational Landings (lbs)	.	.	13,675	75,036	.	12,668	63,343	3,424	124,331	.	431,205	45,245	44,637	168,582	38,021
Estimated Commercial Landings (lbs)	5,549	30,488	74,171	33,119	23,712	50,265	69,808	89,195	64,969	72,443	175,701	145,450	129,943	76,531	44,660
Estimated Total Landings (lbs)	.	.	87,846	108,155	.	62,933	133,151	92,619	189,300	.	606,906	190,695	174,580	245,113	82,681
Landings Ratio (Rec/Comm)	.	.	0.18	2.27	.	0.25	0.91	0.04	1.91	.	2.45	0.31	0.34	2.20	0.85
Percent Commercial	.	.	84.4%	30.6%	.	79.9%	52.4%	96.3%	34.3%	.	29.0%	76.3%	74.4%	31.2%	54.0%
Number of Commercial Trips	.	.	.	.	.	2,873	3,188	4,133	2,726	3,427	5,586	4,445	2,957	2,546	1,181
Average Number of Pounds/Trip	.	.	.	.	.	17.50	21.90	21.58	23.83	21.14	31.45	32.72	43.94	30.06	37.82

Data Sources: Recreational catch estimates were taken from the National Marine Fisheries Service's Marine Recreational Fisheries Statistical Surveys. Commercial landings data were taken from the National Marine Fisheries Service, Southeast Fisheries Science Center (1981-1985) and from the Florida Department of Environmental Protection's Marine Fisheries Information System (1986-1995 through Trip Ticket Batch 411).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG ATLANTIC

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
86	JANUARY	1	382	49	551	50	933
	FEBRUARY	4	418	42	388	46	806
	MARCH	1	34	46	329	47	363
	APRIL	1	279	75	626	76	905
	MAY	1	450	26	266	27	716
	JUNE	2	788	22	102	24	890
	JULY	6	1,584	57	384	63	1,968
	AUGUST	5	1,030	54	553	59	1,583
	SEPTEMBER	2	136	42	336	44	472
	OCTOBER	4	280	54	405	58	685
	NOVEMBER	3	161	55	412	58	573
	DECEMBER	1	12	56	428	57	440
	ANNUAL	31	5,554	578	4,780	609	10,334
87	MONTH						
	JANUARY	4	664	179	1,799	183	2,463
	FEBRUARY	.	.	59	542	59	542
	MARCH	1	48	49	383	50	431
	APRIL	.	.	52	697	52	697
	MAY	7	557	46	302	53	859
	JUNE	1	28	52	413	53	441
	JULY	.	.	39	841	39	841
	AUGUST	6	836	46	416	52	1,252
	SEPTEMBER	2	1,147	68	1,688	70	2,835
	OCTOBER	.	.	54	379	54	379
	NOVEMBER	2	37	62	503	64	540
	DECEMBER	2	183	83	543	85	726
	ANNUAL	25	3,500	789	8,506	814	12,006

(CONTINUED)

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG ATLANTIC

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
88	JANUARY	.	.	59	513	59	513
	FEBRUARY	3	653	72	541	75	1,194
	MARCH	1	44	56	988	57	1,032
	APRIL	3	269	48	289	51	558
	MAY	4	150	29	302	33	452
	JUNE	2	202	27	195	29	397
	JULY	2	988	40	949	42	1,937
	AUGUST	4	1,119	75	1,439	79	2,558
	SEPTEMBER	1	425	50	321	51	746
	OCTOBER	1	696	75	529	76	1,225
	NOVEMBER	1	2	83	499	84	501
	DECEMBER	3	122	76	936	79	1,058
	ANNUAL	25	4,670	690	7,501	715	12,171
89	MONTH						
	JANUARY	5	351	137	1,280	142	1,631
	FEBRUARY	3	47	44	444	47	491
	MARCH	2	160	70	1,006	72	1,166
	APRIL	5	693	47	581	52	1,274
	MAY	3	334	26	620	29	954
	JUNE	3	50	30	412	33	462
	JULY	7	2,146	38	181	45	2,327
	AUGUST	4	1,216	38	414	42	1,630
	SEPTEMBER	2	35	40	399	42	434
	OCTOBER	5	314	83	723	88	1,037
	NOVEMBER	2	153	92	1,283	94	1,436
	DECEMBER	.	.	96	1,094	96	1,094
	ANNUAL	41	5,499	741	8,437	782	13,936

(CONTINUED)

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG ATLANTIC

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
90	JANUARY	1	220	99	1,139	100	1,359
	FEBRUARY	2	304	43	647	45	951
	MARCH	1	120	48	190	49	310
	APRIL	.	.	27	111	27	111
	MAY	7	897	53	359	60	1,256
	JUNE	6	1,442	52	921	58	2,363
	JULY	2	96	42	281	44	377
	AUGUST	1	7	58	521	59	528
	SEPTEMBER	2	56	66	741	68	797
	OCTOBER	.	.	78	712	78	712
	NOVEMBER	3	407	135	925	138	1,332
	DECEMBER	2	60	96	866	98	926
	ANNUAL	27	3,609	797	7,413	824	11,022
91	MONTH						
	JANUARY	3	156	107	863	110	1,019
	FEBRUARY	10	329	81	799	91	1,128
	MARCH	4	264	60	536	64	800
	APRIL	2	323	66	650	68	973
	MAY	7	780	60	547	67	1,327
	JUNE	13	2,450	80	465	93	2,915
	JULY	7	1,750	71	1,079	78	2,829
	AUGUST	12	3,668	85	1,070	97	4,738
	SEPTEMBER	1	54	82	806	83	860
	OCTOBER	4	626	122	899	126	1,525
	NOVEMBER	2	29	127	1,054	129	1,083
	DECEMBER	8	625	207	1,831	215	2,456
	ANNUAL	73	11,054	1,148	10,599	1,221	21,653

(CONTINUED)

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG ATLANTIC

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
92	JANUARY	3	239	115	1,046	118	1,285
	FEBRUARY	6	175	70	545	76	720
	MARCH	5	679	77	929	82	1,608
	APRIL	5	129	58	614	63	743
	MAY	1	50	70	385	71	435
	JUNE	4	171	68	503	72	674
	JULY	19	2,522	104	1,780	123	4,302
	AUGUST	6	418	101	1,156	107	1,574
	SEPTEMBER	5	227	90	744	95	971
	OCTOBER	5	800	162	1,456	167	2,256
	NOVEMBER	1	12	78	512	79	524
	DECEMBER	10	2,012	125	1,652	135	3,664
	ANNUAL	70	7,434	1,118	11,322	1,188	18,756
93	MONTH						
	JANUARY	1	25	67	534	68	559
	FEBRUARY	2	44	52	445	54	489
	MARCH	8	335	79	576	87	911
	APRIL	3	158	68	429	71	587
	MAY	5	116	67	652	72	768
	JUNE	2	485	72	570	74	1,055
	JULY	5	822	73	1,601	78	2,423
	AUGUST	2	108	54	531	56	639
	SEPTEMBER	1	41	39	352	40	393
	OCTOBER	7	349	83	864	90	1,213
	NOVEMBER	2	107	105	724	107	831
	DECEMBER	3	537	61	595	64	1,132
	ANNUAL	41	3,127	820	7,873	861	11,000

(CONTINUED)

DEPARTMENT OF ENVIRONMENTAL PROTECTION
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MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG ATLANTIC

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
94	JANUARY	2	48	75	697	77	745
	FEBRUARY	4	200	75	574	79	774
	MARCH	5	230	91	639	96	869
	APRIL	3	132	64	778	67	910
	MAY	1	150	86	995	87	1,145
	JUNE	3	667	51	578	54	1,245
	JULY	3	209	57	986	60	1,195
	AUGUST	4	571	42	571	46	1,142
	SEPTEMBER	1	247	64	487	65	734
	OCTOBER	2	144	90	934	92	1,078
	NOVEMBER	3	148	84	639	87	787
	DECEMBER	2	459	92	943	94	1,402
	ANNUAL	33	3,205	871	8,821	904	12,026
95	MONTH						
	JANUARY	2	308	77	473	79	781
	FEBRUARY	2	272	57	263	59	535
	MARCH	4	2,224	43	660	47	2,884
	APRIL	.	.	34	185	34	185
	MAY	5	796	35	237	40	1,033
	JUNE	3	772	13	45	16	817
	JULY	.	.	1	23	1	23
	AUGUST	1	39	9	34	10	73
	SEPTEMBER	.	.	5	27	5	27
	OCTOBER	1	116	9	52	10	168
	NOVEMBER	2	237	16	52	18	289
	DECEMBER	.	.	21	210	21	210
	ANNUAL	20	4,764	320	2,261	340	7,025

FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG GULF

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
86	JANUARY	5	823	229	1,442	234	2,265
	FEBRUARY	7	752	217	2,505	224	3,257
	MARCH	6	311	157	1,494	163	1,805
	APRIL	10	902	243	2,397	253	3,299
	MAY	20	4,026	229	2,659	249	6,685
	JUNE	33	2,858	221	2,541	254	5,399
	JULY	19	2,631	269	3,049	288	5,680
	AUGUST	13	2,811	237	2,828	250	5,639
	SEPTEMBER	16	3,218	280	3,372	296	6,590
	OCTOBER	20	4,784	275	2,078	295	6,862
	NOVEMBER	4	81	202	1,715	206	1,796
	DECEMBER	2	285	157	649	159	934
	ANNUAL	155	23,482	2,716	26,729	2,871	50,211
87	MONTH						
	JANUARY	13	3,004	203	1,626	216	4,630
	FEBRUARY	13	2,138	270	4,159	283	6,297
	MARCH	13	1,138	134	1,979	147	3,117
	APRIL	8	1,337	135	1,297	143	2,634
	MAY	13	1,935	337	2,727	350	4,662
	JUNE	6	338	395	3,344	401	3,682
	JULY	29	10,447	355	4,192	384	14,639
	AUGUST	24	5,231	258	3,449	282	8,680
	SEPTEMBER	23	4,443	285	3,581	308	8,024
	OCTOBER	15	3,805	239	2,045	254	5,850
	NOVEMBER	2	114	146	1,655	148	1,769
	DECEMBER	6	1,120	262	4,553	268	5,673
	ANNUAL	165	35,050	3,019	34,607	3,184	69,657

(CONTINUED)

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG GULF

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
88	JANUARY	24	3,223	283	4,838	307	8,061
	FEBRUARY	46	6,723	473	8,687	519	15,410
	MARCH	38	4,874	277	4,047	315	8,921
	APRIL	6	579	269	2,163	275	2,742
	MAY	10	988	307	2,299	317	3,287
	JUNE	13	1,021	392	2,669	405	3,690
	JULY	37	5,782	395	4,063	432	9,845
	AUGUST	48	7,655	404	4,197	452	11,852
	SEPTEMBER	27	5,820	258	2,509	285	8,329
	OCTOBER	18	5,161	314	3,111	332	8,272
	NOVEMBER	15	1,157	173	2,031	188	3,188
	DECEMBER	16	2,029	285	3,172	301	5,201
	ANNUAL	298	45,012	3,830	43,786	4,128	88,798
89	MONTH						
	JANUARY	12	312	204	2,534	216	2,846
	FEBRUARY	7	622	124	2,423	131	3,045
	MARCH	18	2,492	157	2,683	175	5,175
	APRIL	15	1,653	226	1,762	241	3,415
	MAY	17	3,089	196	2,139	213	5,228
	JUNE	19	2,495	174	3,042	193	5,537
	JULY	43	6,298	181	2,181	224	8,479
	AUGUST	39	7,581	231	3,845	270	11,426
	SEPTEMBER	21	6,024	242	2,485	263	8,509
	OCTOBER	12	2,182	280	1,877	292	4,059
	NOVEMBER	7	573	219	1,895	226	2,468
	DECEMBER	33	3,012	247	1,756	280	4,768
	ANNUAL	243	36,333	2,481	28,622	2,724	64,955

(CONTINUED)

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG GULF

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
90	JANUARY	25	2,744	272	2,757	297	5,501
	FEBRUARY	8	952	149	1,623	157	2,575
	MARCH	13	876	123	1,584	136	2,460
	APRIL	8	482	181	1,505	189	1,987
	MAY	6	1,398	222	2,963	228	4,361
	JUNE	48	9,130	286	5,207	334	14,337
	JULY	45	9,922	255	2,873	300	12,795
	AUGUST	25	5,104	256	3,560	281	8,664
	SEPTEMBER	7	1,891	385	4,804	392	6,695
	OCTOBER	14	2,183	486	5,332	500	7,515
	NOVEMBER	5	226	352	3,366	357	3,592
	DECEMBER	8	247	248	1,714	256	1,961
	ANNUAL	212	35,155	3,215	37,288	3,427	72,443
91	MONTH						
	JANUARY	3	612	169	1,251	172	1,863
	FEBRUARY	5	1,102	181	3,332	186	4,434
	MARCH	10	1,879	235	2,323	245	4,202
	APRIL	20	5,626	361	3,495	381	9,121
	MAY	31	5,622	529	8,104	560	13,726
	JUNE	100	14,056	662	7,771	762	21,827
	JULY	97	18,509	606	7,863	703	26,372
	AUGUST	88	21,028	662	8,127	750	29,155
	SEPTEMBER	56	12,083	623	7,355	679	19,438
	OCTOBER	29	4,518	404	4,171	433	8,689
	NOVEMBER	30	8,428	262	2,603	292	11,031
	DECEMBER	139	22,862	284	2,961	423	25,823
	ANNUAL	608	116,325	4,978	59,356	5,586	175,681

(CONTINUED)

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG GULF

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
92	JANUARY	99	11,683	257	3,751	356	15,434
	FEBRUARY	73	7,487	345	4,775	418	12,262
	MARCH	47	5,774	291	2,879	338	8,653
	APRIL	32	2,207	300	3,463	332	5,670
	MAY	31	5,951	401	5,869	432	11,820
	JUNE	59	8,322	386	4,693	445	13,015
	JULY	87	15,644	500	6,878	587	22,522
	AUGUST	53	13,448	386	4,329	439	17,777
	SEPTEMBER	30	11,772	309	4,807	339	16,579
	OCTOBER	10	1,886	249	1,869	259	3,755
	NOVEMBER	20	1,666	172	1,433	192	3,099
	DECEMBER	41	11,603	267	3,261	308	14,864
	ANNUAL	582	97,443	3,863	48,007	4,445	145,450
93	MONTH						
	JANUARY	9	1,283	162	1,597	171	2,880
	FEBRUARY	21	1,761	109	1,102	130	2,863
	MARCH	28	5,593	171	2,161	199	7,754
	APRIL	22	5,388	130	1,441	152	6,829
	MAY	23	6,006	199	2,615	222	8,621
	JUNE	48	22,290	291	4,241	339	26,531
	JULY	38	7,199	307	4,637	345	11,836
	AUGUST	56	26,818	254	3,139	310	29,957
	SEPTEMBER	34	6,936	289	3,762	323	10,698
	OCTOBER	54	9,224	315	4,851	369	14,075
	NOVEMBER	9	1,053	196	1,446	205	2,499
	DECEMBER	13	3,683	179	1,717	192	5,400
	ANNUAL	355	97,234	2,602	32,709	2,957	129,943

(CONTINUED)

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG GULF

		CATEGORY				TOTAL	
		OVER HALF		LESS THAN HALF			
		PERMIT		PERMIT		PERMIT	
		N	SUM	N	SUM	N	SUM
YEAR	MONTH						
94	JANUARY	24	3,254	189	3,230	213	6,484
	FEBRUARY	23	7,125	239	3,809	262	10,934
	MARCH	25	6,901	239	2,485	264	9,386
	APRIL	14	2,828	276	3,500	290	6,328
	MAY	22	4,844	220	2,596	242	7,440
	JUNE	27	3,845	187	3,167	214	7,012
	JULY	41	6,296	163	2,241	204	8,537
	AUGUST	22	3,255	171	1,796	193	5,051
	SEPTEMBER	15	2,816	147	1,675	162	4,491
	OCTOBER	6	1,302	140	1,444	146	2,746
	NOVEMBER	2	1,545	174	1,259	176	2,804
	DECEMBER	11	4,006	169	1,312	180	5,318
	ANNUAL	232	48,017	2,314	28,514	2,546	76,531
95	MONTH						
	JANUARY	21	7,406	144	1,987	165	9,393
	FEBRUARY	17	5,945	172	3,710	189	9,655
	MARCH	26	3,208	116	1,267	142	4,475
	APRIL	14	761	119	987	133	1,748
	MAY	26	6,060	159	2,055	185	8,115
	JUNE	20	4,407	122	2,068	142	6,475
	JULY	8	727	8	121	16	848
	AUGUST	7	232	16	109	23	341
	SEPTEMBER	2	130	26	804	28	934
	OCTOBER	2	99	23	297	25	396
	NOVEMBER	14	943	47	626	61	1,569
	DECEMBER	5	165	67	546	72	711
	ANNUAL	162	30,083	1,019	14,577	1,181	44,660

FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

DATA: PERMIT.WORKING PROGRAM: PERMMO SAS

TABLE 2. FLORIDA PERMIT LANDINGS BY MONTH AND COAST

SUB_REG INLAND/OUT OF STATE

		CATEGORY			
		LESS THAN HALF		TOTAL	
		PERMIT		PERMIT	
		N	SUM	N	SUM
YEAR	MONTH				
86	MARCH	1	48	1	48
	OCTOBER	1	6	1	6
	ANNUAL	2	54	2	54
87	MONTH				
	JUNE	1	6	1	6
	AUGUST	1	104	1	104
	SEPTEMBER	1	26	1	26
	NOVEMBER	1	15	1	15
	ANNUAL	4	151	4	151
88	MONTH				
	APRIL	1	85	1	85
	MAY	1	232	1	232
	SEPTEMBER	2	76	2	76
	OCTOBER	1	4	1	4
	ANNUAL	5	397	5	397
89	MONTH				
	MARCH	1	6	1	6
	NOVEMBER	1	8	1	8
	ANNUAL	2	14	2	14

PROGRAM: PERMG SAS EDITED BATCHES 1 -411

TABLE 3. FLORIDA PERMIT LANDINGS BY COAST AND GEAR

		COAST			
		ATLANTIC		GULF	
		TRIPS	PERMIT	TRIPS	PERMIT
YEAR	GEAR USED				
92	UNKNOWN	100	1,487	693	17,627
	TRAWL	.	.	6	49
	GILL NET	879	15,079	3,238	105,957
	TRAMMEL	143	968	145	5,426
	HOOK AND LINE	56	1,106	272	13,411
	OTHER	10	116	91	2,980
	TOTAL	1,188	18,756	4,445	145,450
93	GEAR USED				
	UNKNOWN	15	238	107	1,988
	TRAWL	.	.	1	1
	GILL NET	615	7,724	2,528	112,155
	TRAMMEL	149	1,215	79	4,431
	HOOK AND LINE	63	1,544	184	8,579
	OTHER	19	279	58	2,789
	TOTAL	861	11,000	2,957	129,943
94	GEAR USED				
	UNKNOWN	7	61	14	124
	TRAWL	1	90	1	33
	GILL NET	735	10,147	2,245	64,826
	TRAMMEL	92	666	127	7,133
	HOOK AND LINE	48	993	85	3,393
	OTHER	21	69	74	1,022
	TOTAL	904	12,026	2,546	76,531
95	GEAR USED				
	UNKNOWN	2	9	48	2,278
	TRAWL	4	45	.	.
	GILL NET	230	5,462	725	28,889
	TRAMMEL	17	270	63	3,144
	GIG/SPEAR	1	6	1	2
	HOOK AND LINE	50	804	212	7,824

(CONTINUED)

PROGRAM: PERMG SAS EDITED BATCHES 1 -411

TABLE 3. FLORIDA PERMIT LANDINGS BY COAST AND GEAR

		COAST			
		ATLANTIC		GULF	
		TRIPS	PERMIT	TRIPS	PERMIT
YEAR	GEAR USED				
95	OTHER	36	429	132	2,523
	TOTAL	340	7,025	1,181	44,660

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PROGRAM: PERMSPL SAS DATA: EDITED BATCHES 1 - 411

TABLE 4. PERMIT SPL LICENSES AND ANNUAL PRODUCTION SUMMARY

		COAST								
		ATLANTIC			GULF			INLAND/OUT OF STATE		
YEAR	POUND CATEGORY	NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS
87	LESS THAN 100 LBS	176	529	3,838	468	1,569	9,591	1	3	47
	100 - 999 LBS	24	273	5,803	106	1,382	33,499	1	1	104
	1000 - 4,999 LBS	2	12	2,365	13	233	26,567	.	.	.
	TOTAL	202	814	12,006	587	3,184	69,657	2	4	151
88	LESS THAN 100 LBS	186	498	3,363	616	2,000	11,832	3	4	165
	100 - 999 LBS	23	184	5,839	133	1,447	39,749	1	1	232
	1000 - 4,999 LBS	2	33	2,969	21	682	37,217	.	.	.
	TOTAL	211	715	12,171	770	4,129	88,798	4	5	397
89	LESS THAN 100 LBS	206	491	3,262	585	1,653	10,998	1	2	14
	100 - 999 LBS	32	272	9,661	103	920	34,604	.	.	.
	1000 - 4,999 LBS	1	19	1,013	9	139	13,695	.	.	.
	5,000 - 9,999 LBS	.	.	.	1	12	5,658	.	.	.
	TOTAL	239	782	13,936	698	2,724	64,955	1	2	14
90	LESS THAN 100 LBS	228	627	4,138	633	1,963	10,499	.	.	.
	100 - 999 LBS	25	195	5,652	107	1,147	31,642	.	.	.
	1000 - 4,999 LBS	1	2	1,232	13	292	24,909	.	.	.
	5,000 - 9,999 LBS	.	.	.	1	25	5,393	.	.	.

(CONTINUED)

PROGRAM: PERMSPL SAS DATA: EDITED BATCHES 1 - 411

TABLE 4. PERMIT SPL LICENSES AND ANNUAL PRODUCTION SUMMARY

		COAST								
		ATLANTIC			GULF			INLAND/OUT OF STATE		
YEAR		NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS
90	TOTAL	254	824	11,022	754	3,427	72,443	.	.	.
91	POUND CATEGORY									
	LESS THAN 100 LBS	278	748	4,747	658	2,150	12,763	.	.	.
	100 - 999 LBS	42	446	13,142	170	2,260	57,621	.	.	.
	1000 - 4,999 LBS	3	27	3,764	42	1,063	92,022	.	.	.
	5,000 - 9,999 LBS	.	.	.	2	113	13,275	.	.	.
	TOTAL	323	1,221	21,653	872	5,586	175,681	.	.	.
92	POUND CATEGORY									
	LESS THAN 100 LBS	254	715	5,027	560	1,655	11,221	.	.	.
	100 - 999 LBS	41	429	10,467	174	1,872	58,817	.	.	.
	1000 - 4,999 LBS	2	44	3,262	37	908	70,243	.	.	.
	5,000 - 9,999 LBS	.	.	.	1	10	5,169	.	.	.
	TOTAL	297	1,188	18,756	772	4,445	145,450	.	.	.
93	POUND CATEGORY									
	LESS THAN 100 LBS	219	610	4,391	496	1,286	8,563	.	.	.
	100 - 999 LBS	27	251	6,609	126	1,249	40,379	.	.	.
	1000 - 4,999 LBS	.	.	.	28	415	55,200	.	.	.
	10,000 LBS OR MORE	.	.	.	2	7	25,801	.	.	.
	TOTAL	246	861	11,000	652	2,957	129,943	.	.	.

(CONTINUED)

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
MARINE FISHERIES INFORMATION SYSTEM

PROGRAM: PERMSPL SAS DATA: EDITED BATCHES 1 - 411

TABLE 4. PERMIT SPL LICENSES AND ANNUAL PRODUCTION SUMMARY

		COAST								
		ATLANTIC			GULF			INLAND/OUT OF STATE		
YEAR	POUND CATEGORY	NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS	NUMBER OF LICENSES	TRIPS	POUNDS
94	LESS THAN 100 LBS	254	667	4,428	466	1,227	9,223	.	.	.
	100 - 999 LBS	33	237	7,598	112	1,064	35,380	.	.	.
	1000 - 4,999 LBS	.	.	.	18	255	31,928	.	.	.
	TOTAL	287	904	12,026	596	2,546	76,531	.	.	.
95	POUND CATEGORY									
	LESS THAN 100 LBS	161	285	1,865	334	724	6,798	.	.	.
	100 - 999 LBS	15	53	3,962	67	375	22,310	.	.	.
	1000 - 4,999 LBS	1	2	1,198	6	82	15,552	.	.	.
	TOTAL	177	340	7,025	407	1,181	44,660	.	.	.

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
	2	0	1	0	3	0
ALEWIVES (HERRING)	1	4	.	.	1	4
AMBERJACK	22	7,873	46	6,944	68	14,817
AMBERJACK, LESSER (CORES)	.	.	1	159	1	159
ANCHOVIES (POUNDS)	.	.	10	19,700	10	19,700
ANGELFISH	56	925	350	2,879	406	3,804
BAIT FISH (NUMBER)	2	145	12	43	14	188
BAITFISH (POUNDS)	31	999	1,101	114,338	1,132	115,337
BALLYHOO	3	155	1	2	4	157
BARRACUDA	17	4,717	7	403	24	5,120
BLUE CRABS (HARD, NUMBERS)	.	.	4	242	4	242
BLUECRABS (HARDSHELL)	13	1,212	99	14,315	112	15,527
BLUECRABS (SOFTSHELL, NUMBER)	1	28	.	.	1	28
BLUEFISH	1,954	137,616	3,688	115,677	5,642	253,293
BLUERUNNER	120	3,521	43	2,157	163	5,678
BONITO (LITTLE TUNNY)	3	111	67	4,020	70	4,131
BREAM, RED (TORO)	.	.	3	72	3	72
BUMPER, ATLANTIC	3	298	14	76	17	374
BUTTERFISH	3	53	205	3,347	208	3,400
CATFISH	819	48,488	357	39,480	1,176	87,968

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
		POUNDS		POUNDS		POUNDS
NAME	TRIPS	SUM	TRIPS	SUM	TRIPS	SUM
CLAMS, CHERRY (NUMBER)	1	0	.	.	1	0
CLAMS, MIDDLENECK (NUMBER)	1	0	.	.	1	0
COBIA	51	1,440	344	10,657	395	12,097
CONCHS (WHELKS - HELMET)	.	.	1	4	1	4
COWFISH, SCRAWLED	.	.	1	8	1	8
CROAKER	635	6,258	192	897	827	7,155
CRUSTACEAN (MIXED)	1	11	.	.	1	11
CUSK EEL	.	.	1	28	1	28
CUTLASSFISH	.	.	1	3	1	3
DOLPHIN	10	377	6	429	16	806
DRUM, BLACK	244	4,218	1,206	25,222	1,450	29,440
EELS	2	5	2	6	4	11
ESCOLAR	.	.	1	33	1	33
FLOUNDER, GULF	23	53	1,043	4,001	1,066	4,054
FLOUNDER, SOUTHERN	7	465	1	5	8	470
FLOUNDER, SUMMER	6	25	.	.	6	25
FLOUNDERS	1,081	10,288	3,679	16,086	4,760	26,374
GOATFISHES	72	2,312	63	1,208	135	3,520
GOGGLE-EYE (BIGEYE SCAD)	8	116	2	12	10	128

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
GOGGLE-EYE (BIGEYE SCAD, NUMBERS)	1	6	.	.	1	6
GROUPER, BLACK (CARBERITA)	6	46	32	2,993	38	3,039
GROUPER, GAG	17	1,733	44	3,081	61	4,814
GROUPER, GRAYSBY	1	93	.	.	1	93
GROUPER, HIND, ROCK	.	.	1	6	1	6
GROUPER, MIXED	4	39	.	.	4	39
GROUPER, NASSAU	2	74	1	6	3	80
GROUPER, OTHER	5	92	4	50	9	142
GROUPER, RED	15	240	68	91,262	83	91,502
GROUPER, SCAMP	7	671	20	817	27	1,488
GROUPER, SNOWY	1	1,720	4	395	5	2,115
GROUPER, SPECKLED HIND (KITTY MITCHELL)	.	.	4	385	4	385
GROUPER, WARSAW	1	74	3	13	4	87
GROUPER, YELLOWEDGE	.	.	5	2,985	5	2,985
GROUPER, YELLOWFIN	.	.	3	146	3	146
GRUNTS	43	873	520	16,082	563	16,955
HARVESTFISH	.	.	17	639	17	639
HERRING, THREAD	2	180	13	73,442	15	73,622
HOG SNAPPER (HOGFISH)	5	109	44	1,235	49	1,344

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
JACK, ALMACO	1	36	.	.	1	36
JACK, ATLANTIC MOONFISH	51	2,227	.	.	51	2,227
JACK, CREVALLE (LARGE)	1,527	90,372	7,016	790,842	8,543	881,214
JACK, LOOKDOWN	.	.	45	709	45	709
JACK, MIXED	858	38,214	1,603	167,942	2,461	206,156
JACK, OTHER	117	2,694	131	12,009	248	14,703
JACK, YELLOW	.	.	5	406	5	406
KINGFISH (KING MACKEREL)	24	2,033	94	3,336	118	5,369
LADYFISH (HEADED & GUTTED)	2	18	76	2,198	78	2,216
LADYFISH (SKIPJACK)	139	6,224	1,947	125,843	2,086	132,067
LIVE ROCK, RUBBLE (POUNDS)	.	.	1	420	1	420
LOBSTER, SPANISH (TAILS)	.	.	1	112	1	112
LOBSTER, SPINY (TAILS)	3	339	.	.	3	339
LOBSTER, SPINY (WHOLE)	9	280	28	200	37	480
MACKEREL, CERO	1	2	13	2,476	14	2,478
MACKEREL, CHUB	2	21	13	1,178	15	1,199
MACKEREL, SPANISH	1,205	116,677	3,330	303,840	4,535	420,517
MARGATES	14	177	9	134	23	311
MENHADEN (POGIES)	348	70,759	160	26,363	508	97,122
MISC. FOOD FISH	2,092	58,638	5,127	129,536	7,219	188,174

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
MISC. INDUSTRIAL FISH	21	1,985	709	53,111	730	55,096
MOJARRA, IRISH POMPANO	1	3	.	.	1	3
MOJARRAS	1,418	85,873	2,222	75,768	3,640	161,641
MULLET ROE (ONLY, W/R)	.	.	17	444	17	444
MULLET, BLACK (LISA)	1,068	100,298	7,250	2,065,226	8,318	2,165,524
MULLET, BLACK, (RED ROE)	202	53,024	1,356	352,698	1,558	405,722
MULLET, BLACK, (WHITE ROE)	106	19,372	1,258	244,564	1,364	263,936
MULLET, FINGERLING (NUMBERS)	11	162	4	105	15	267
MULLET, SILVER	141	11,615	218	28,587	359	40,202
NEEDLEFISH	.	.	1	4	1	4
NILE PERCH	16	160	97	6,564	113	6,724
OCTOPUS	.	.	5	145	5	145
PARROTFISH	1	4	3	8	4	12
PERMIT	4,514	70,460	16,715	572,265	21,229	642,725
PINFISH (NUMBERS)	2	4	21	51	23	55
PINFISH (POUNDS)	9	257	127	2,892	136	3,149
POMPANO	2,302	121,464	6,185	261,495	8,487	382,959
POMPANO, AFRICAN	3	65	83	10,924	86	10,989
PORGY, RED	1	6	.	.	1	6
PUFFER, SPINY BOX	.	.	1	5	1	5

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
PUFFERS	.	.	3	3	3	3
RAYS	.	.	456	133,835	456	133,835
SAND PERCH (SERRANIDAE)	60	1,170	324	2,440	384	3,610
SARDINES, SCALED	1	3	.	.	1	3
SCAD, ROUND (CIGARFISH, NUMBERS)	.	.	1	3	1	3
SCAD, ROUND (CIGARFISH, POUNDS)	.	.	5	698	5	698
SEA BASS (COMMON)	8	263	47	759	55	1,022
SEA BASS, BANK	.	.	1	59	1	59
SEA BASS, BLACK	3	12	8	26	11	38
SEAHORSE, GIANT	.	.	1	3	1	3
SEAROBIN	.	.	1	4	1	4
SEAROBINS	1	8	.	.	1	8
SEATROUT, GREY (WEAKFISH, EAST COAST)	346	4,624	203	851	549	5,475
SEATROUT, SAND (WEST COAST)	.	.	232	5,178	232	5,178
SEATROUT, SILVER	23	300	299	2,864	322	3,164
SEATROUT, SPOTTED	1,029	24,967	7,635	123,531	8,664	148,498
SHAD (COMMON)	1	4	341	20,533	342	20,537
SHARK	129	12,422	948	54,203	1,077	66,625
SHARK FINS	6	107	17	447	23	554

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
SHARK, BLACKTIP	16	641	80	4,133	96	4,774
SHARK, BONNETHEAD	1	575	11	1,689	12	2,264
SHARK, BULL	.	.	4	710	4	710
SHARK, LEMON	.	.	1	28	1	28
SHARK, OTHER	3	120	7	489	10	609
SHARK, SANDBAR	1	28	10	8,801	11	8,829
SHEEPSHEAD	2,568	115,572	8,152	229,571	10,720	345,143
SHRIMP, BROWN (HEADS ON)	.	.	1	212	1	212
SHRIMP, PINK (HEADS OFF)	.	.	3	4,537	3	4,537
SHRIMP, PINK (HEADS ON)	.	.	5	1,661	5	1,661
SHRIMP, ROCK (HEADS OFF)	.	.	1	20	1	20
SHRIMP, WHITE (HEADS OFF)	1	1,617	.	.	1	1,617
SHRIMP, WHITE (HEADS ON)	2	95	.	.	2	95
SNAIL, TOP	.	.	1	3	1	3
SNAPPER, CUBERA	2	94	.	.	2	94
SNAPPER, DOG	.	.	1	27	1	27
SNAPPER, LANE	14	64	85	888	99	952
SNAPPER, MANGROVE (GREY)	673	6,964	1,865	12,161	2,538	19,125
SNAPPER, MIXED	20	283	3	245	23	528
SNAPPER, MUTTON	101	1,155	63	3,156	164	4,311

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
SNAPPER, OTHER	55	696	18	277	73	973
SNAPPER, RED	9	176	6	718	15	894
SNAPPER, SILK (YELLOWEYE)	.	.	5	1,452	5	1,452
SNAPPER, VERMILLION (B-LINER)	5	155	5	78	10	233
SNAPPER, YELLOWTAIL	16	1,186	47	18,698	63	19,884
SPADEFISH	56	1,251	1,565	13,252	1,621	14,503
SPANISH SARDINES	.	.	5	548	5	548
SPOT	851	60,148	1,928	32,599	2,779	92,747
SQUID	.	.	2	83	2	83
STONE CRABS (JUMBO CLAWS)	.	.	5	84	5	84
STONE CRABS (LARGE CLAWS)	.	.	43	2,058	43	2,058
STONE CRABS (MED. CLAWS)	.	.	26	1,410	26	1,410
STONE CRABS (SMALL CLAWS)	.	.	3	12	3	12
STONE CRABS (UNGRADED)	.	.	26	2,676	26	2,676
TILEFISH, GOLDEN	.	.	2	230	2	230
TILEFISH, GRAY	2	14	4	7,376	6	7,390
TOADFISH	.	.	1	1	1	1
TRIGGERFISH	15	239	26	377	41	616
TRIPLETAIL	228	1,888	32	173	260	2,061
TRUNKFISH	.	.	1	1	1	1

(CONTINUED)

DATA: PERMIT WORKING BATCHES: 1-411

TABLE 5. SPECIES CAUGHT ON FLORIDA PERMIT TRIPS 1991-1995

	SUB_REG					
	ATLANTIC		GULF		STATEWIDE	
	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM	TRIPS	POUNDS SUM
NAME						
TRUNKFISH, SPOTTED	.	.	1	4	1	4
TUNA, BLACKFIN	2	296	3	65	5	361
TUNA, YELLOWFIN	1	40	.	.	1	40
WHITE SNAPPER (PORGY)	22	870	52	1,205	74	2,075
WHITING	374	15,038	1,099	7,496	1,473	22,534
WRECKFISH	1	3,540	.	.	1	3,540
TOTAL	28,157	1,347,751	94,926	6,523,031	123,083	7,870,782

Table 6a. Actual fork-length measurements of landed permit from MRFSS angler-interview data, 1982-1995 (Atlantic coast).

Atlantic Coast

	YEAR							
	84	85	86	88	89	92	94	95
	N	N	N	N	N	N	N	N
INCH_FL								
9	1	.	.	.	.	.	.	.
10	.	1	.	.	1	.	.	.
11	.	.	.	.	1	.	.	.
13	.	.	.	.	.	.	1	1
14	.	.	.	.	.	.	2	.
15	.	.	1	.	.	.	.	.
27	.	.	.	1	.	.	.	.
28	.	.	.	.	.	1	.	.
Annual	1	1	1	1	2	1	3	1

Table 6b. Actual fork-length measurements of landed permit from MRFSS angler-interview data, 1982-1995 (Gulf Coast).

Gulf Coast

	YEAR												
	83	84	86	87	88	89	91	92	93	94	95		
	N	N	N	N	N	N	N	N	N	N	N		
INCH_FL													
5	.	1	.	.	.	.	.	.	.	.	.		
6	.	1	.	.	.	.	.	.	.	.	.		
8	.	.	.	.	.	.	.	.	1	.	1		
10	.	.	.	.	.	.	.	2	.	.	.		
11	.	.	.	.	.	.	7	1	1	.	.		
12	2	.	.	.	.	.	16	2	.	2	.		
13	.	.	.	.	1	1	8	2	.	2	1		
14	.	.	.	.	.	.	4	1	1	.	.		
15	.	.	.	.	.	.	2	.	.	1	.		
16	.	.	.	.	.	.	2	2	.	.	1		
17	.	.	.	.	.	.	3	.	.	.	1		
18	.	.	.	.	.	.	1	.	.	.	.		
24	.	.	.	.	.	.	.	.	.	.	1		
25	.	.	.	.	.	.	1	1	.	1	1		
27	.	.	.	.	.	1	.	.	.	.	.		
28	.	.	.	1	.	.	1	.	.	2	.		
29	.	.	.	.	.	.	1	.	.	.	.		
30	.	.	.	.	.	.	.	.	.	1	.		
32	.	.	.	1	.	.	.	.	.	.	.		
35	.	.	1	.	.	.	1	.	.	.	.		
37	.	1	.	.	.	.	.	.	.	.	.		
39	.	.	.	.	.	1	.	.	.	.	.		
Annual	2	3	1	2	1	3	47	11	3	9	6		

Table 7a. Bag limit analysis for Florida permit, Atlantic coast

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
FISHERIES STATISTICS SECTION
BAG LIMIT ANALYSIS

05/28/1996
11:33:40
PAGE : 1

SPECIES : Permit data : 1982 - 1995
COAST : East
DATA SOURCE : NMFS Marine Recreational Fisheries Statistical Survey

********** BASED ON FISH KEPT **********

Number of Fish Kept per Angler	Number of Years	Number of Trips	Number of Anglers	Average Number of Anglers per Trip	Cumulative Percentage of Anglers	Number of Fish Caught	Number of Fish Retained	Cumulative Percentages of Fish Caught	Cumulative Percentages of Fish Retained
0	9	78	81	1.04	83.51	10	1	37.04	5.56
1	8	13	14	1.08	97.94	13	13	85.19	77.78
2	2	2	2	1.00	100.00	4	4	100.00	100.00
Totals		93	97			27	18		

Estimated Harvest Reductions Associated with Particular Bag Limits
Number of Intercepts per Iteration 300
Number of Iterations 500

	BAG LIMITS									
	1	2	3	4	5	6	7	8	9	10
Mean	11	0	0	0	0	0	0	0	0	0
Std Dev	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min	2	0	0	0	0	0	0	0	0	0
Max	21	0	0	0	0	0	0	0	0	0

Table 7b. Bag limit analysis for Florida permit, Gulf coast

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA MARINE RESEARCH INSTITUTE
FISHERIES STATISTICS SECTION
BAG LIMIT ANALYSIS

05/28/1996
11:33:59

SPECIES : Permit data : 1982 - 1995
COAST : West
DATA SOURCE : NMFS Marine Recreational Fisheries Statistical Survey

********** BASED ON FISH KEPT **********

Number of Fish Kept per Angler	Number of Years	Number of Trips	Number of Anglers	Average Number of Anglers per Trip	Cumulative Percentage of Anglers	Number of Fish Caught	Number of Fish Retained	Cumulative Percentages of Fish Caught	Cumulative Percentages of Fish Retained
0	13	174	211	1.21	71.04	124	6	38.39	3.26
1	13	53	62	1.17	91.92	68	56	59.44	33.70
2	4	5	10	2.00	95.29	20	20	65.63	44.57
3	2	3	5	1.67	96.97	19	14	71.52	52.17
5	1	1	1	1.00	97.31	5	5	73.07	54.89
6	2	2	3	1.50	98.32	22	18	79.88	64.67
7	1	1	1	1.00	98.65	7	7	82.04	68.48
8	1	1	1	1.00	98.99	8	8	84.52	72.83
13	1	1	2	2.00	99.66	25	25	92.26	86.41
25	1	1	1	1.00	100.00	25	25	100.00	100.00
Totals		242	297			323	184		

Expected Harvest Reductions Associated with Particular Bag Limits
Number of Intercepts per Iteration 300
Number of Iterations 500

	BAG LIMITS									
	1	2	3	4	5	6	7	8	9	10
Mean	52	38	31	27	22	18	15	13	12	10
Std Dev	8.5	9.5	9.5	9.0	8.7	8.5	7.9	7.4	6.7	6.1
Min	24	7	0	0	0	0	0	0	0	0
Max	69	59	53	47	42	37	35	33	31	29

List of Figures

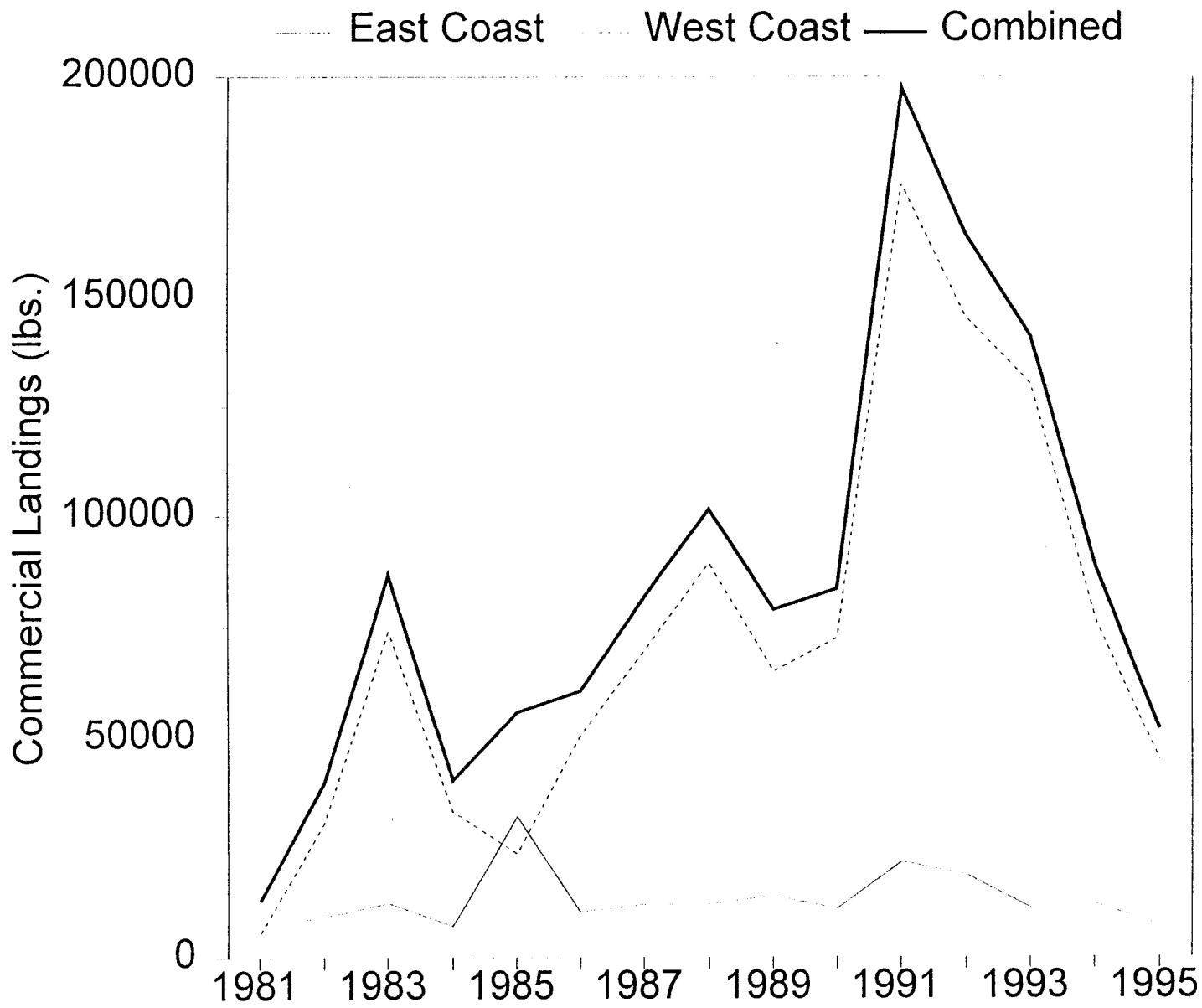
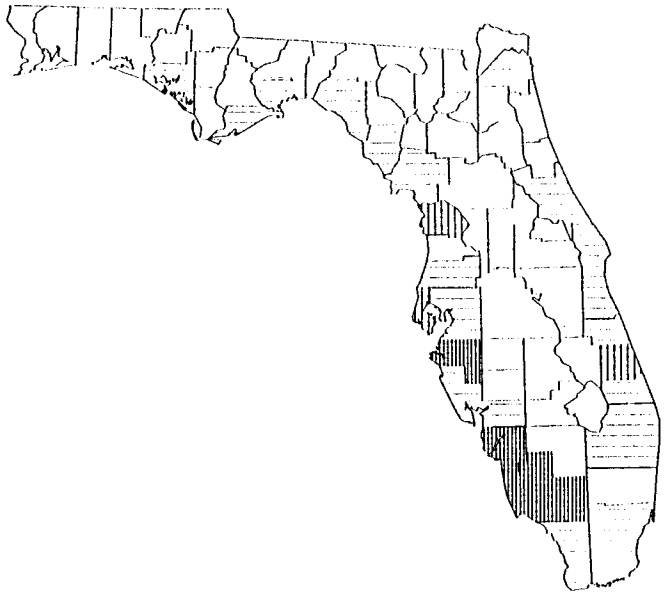


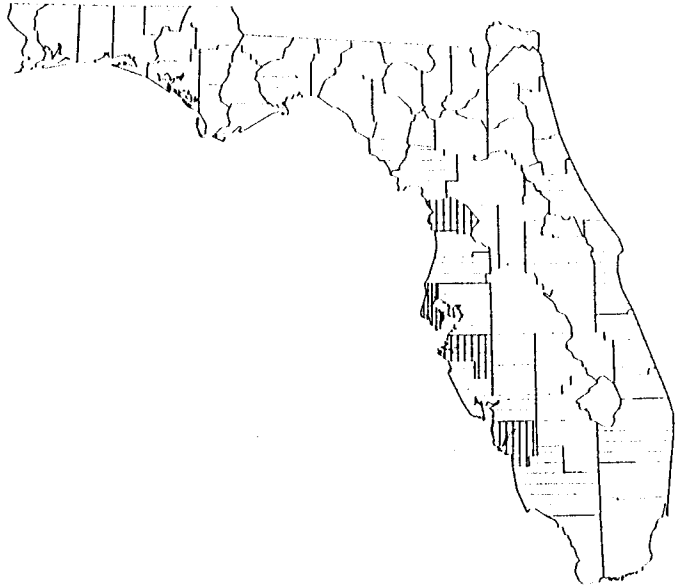
Figure 1. Commercial landings of permit in Florida, 1981-1995

Figure 2. Geographical distribution of commercially landed permit in Florida for 1994 and 1995. Legend: solid black - more than 50,000 pounds; fine crosshatch - 10,001-50,000 pounds; coarse crosshatch - 5,001-10,000 pounds; horizontal lines - 1- 5,000 pounds; blank - no reported landings.

1994



1995



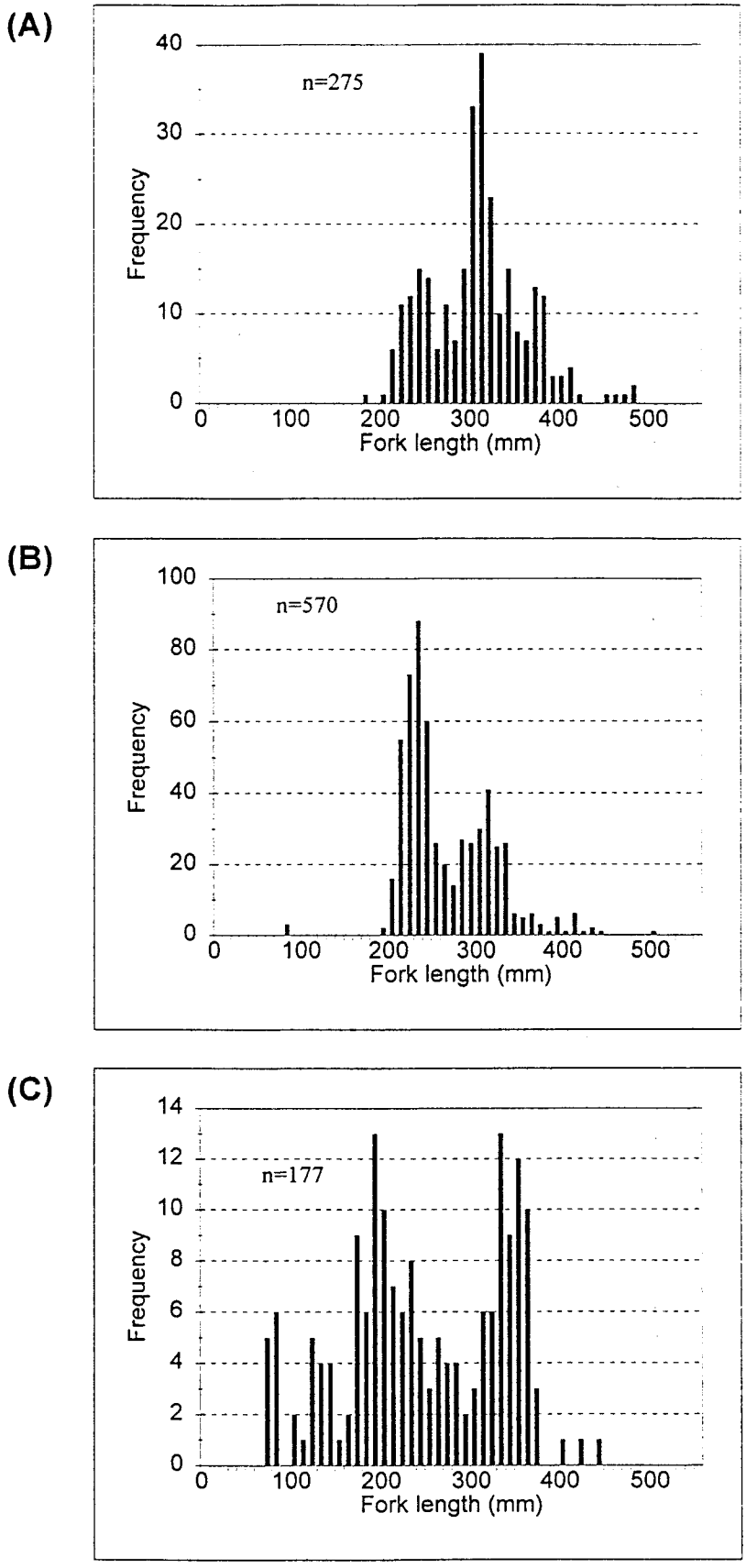


Figure 3. Length frequencies of permit in Florida from (A) east coast commercial samples (B) west coast commercial samples (C) FMRI fishery independent samples from Tampa Bay.

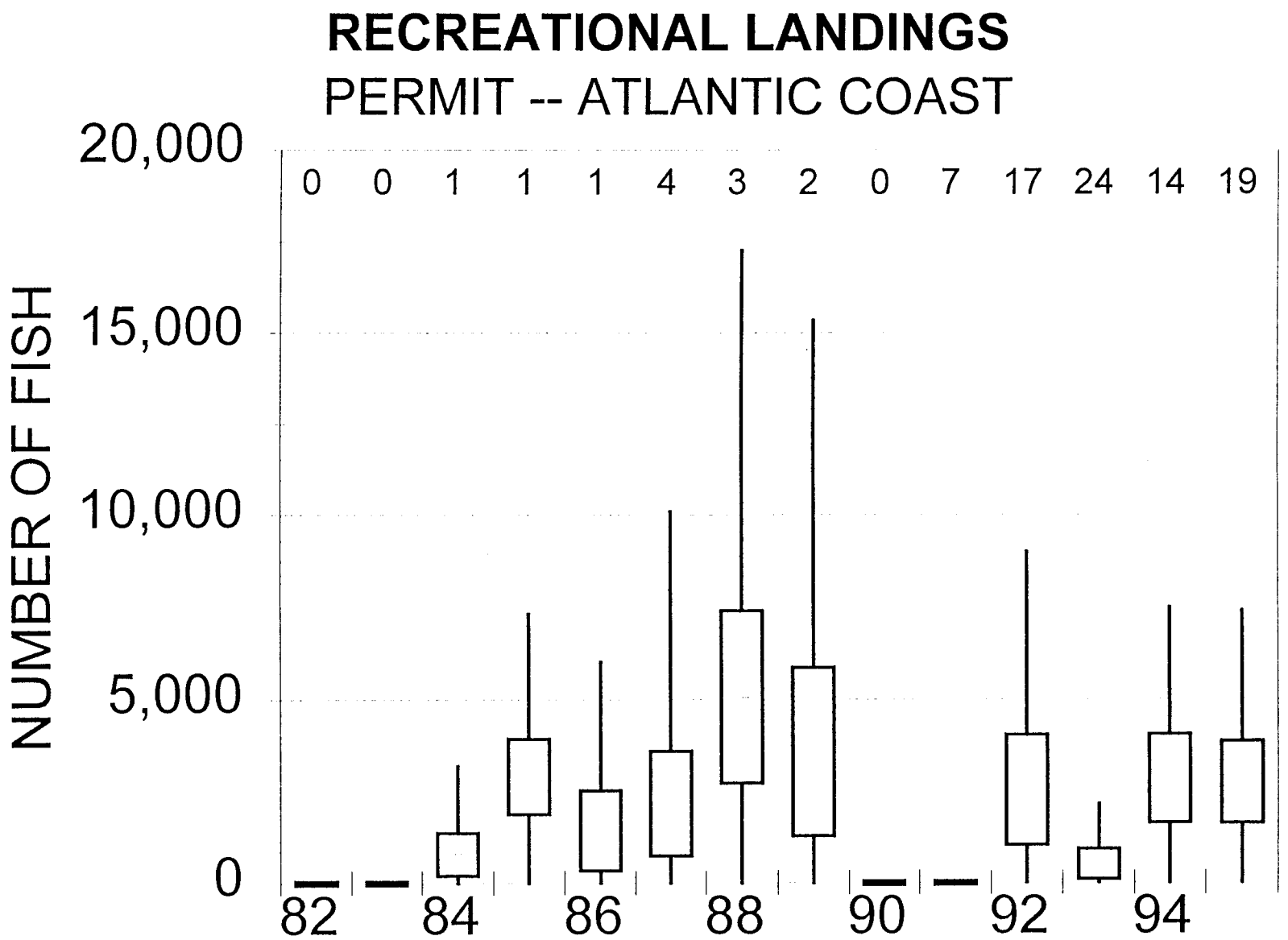


Figure 4a. Florida recreational landings of permit on the Atlantic coast. Vertical bar indicates the range, upper and lower limits of the box are the 25th and 75th quartiles, and the horizontal bar is the median.

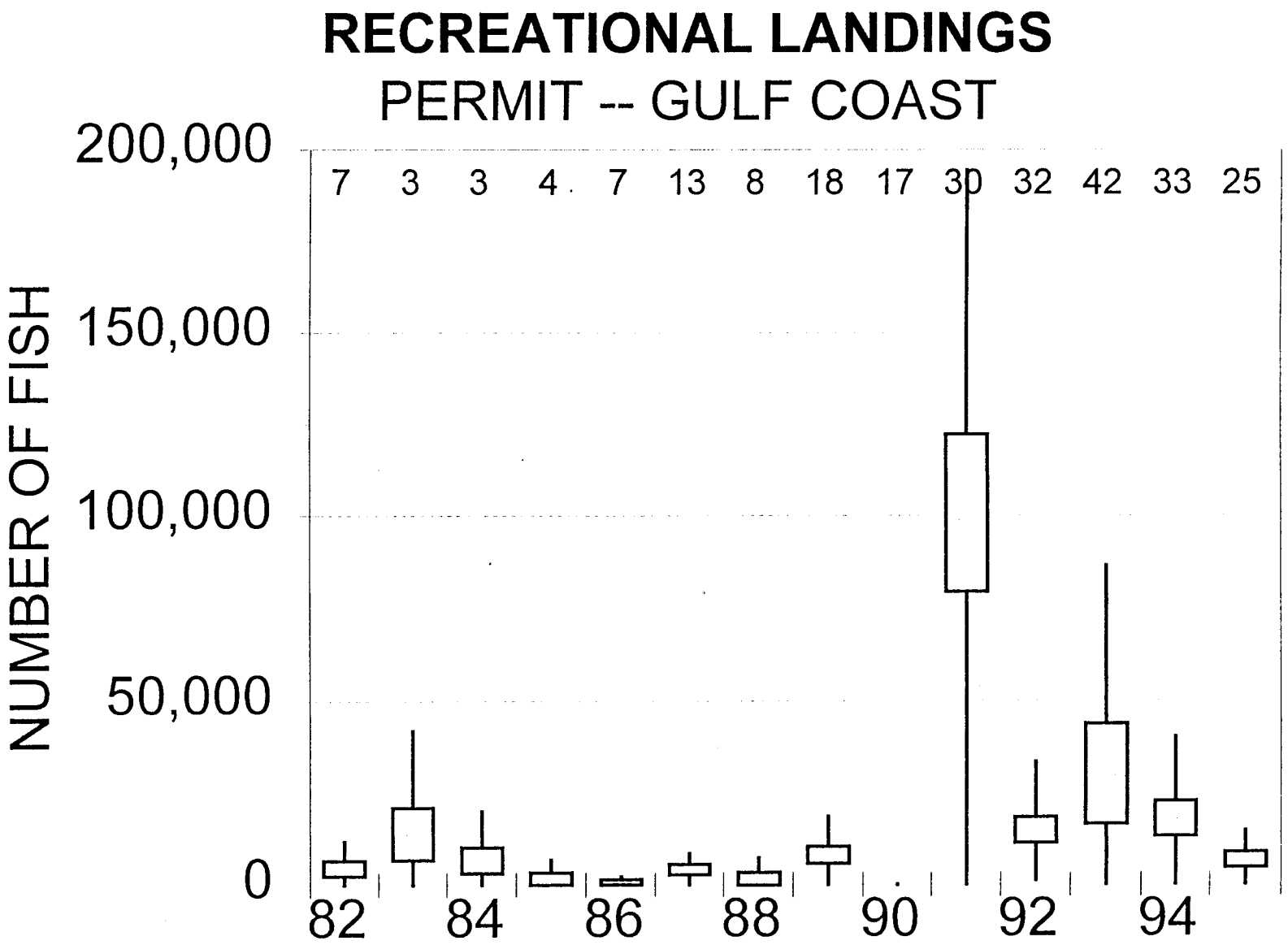
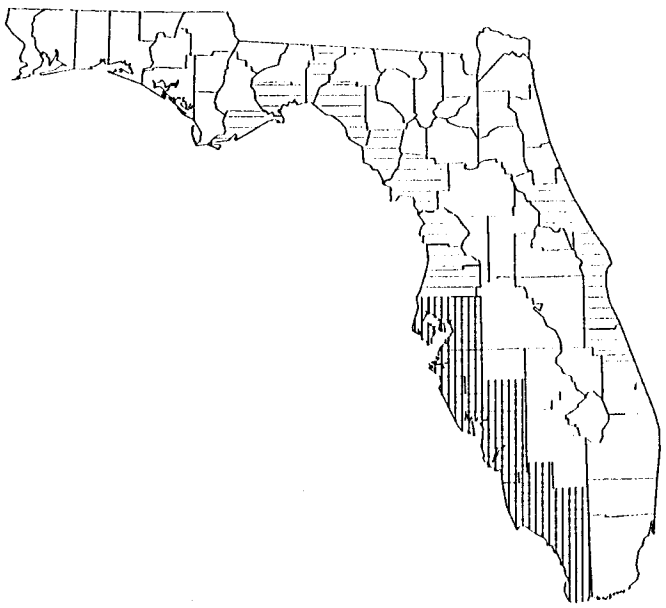


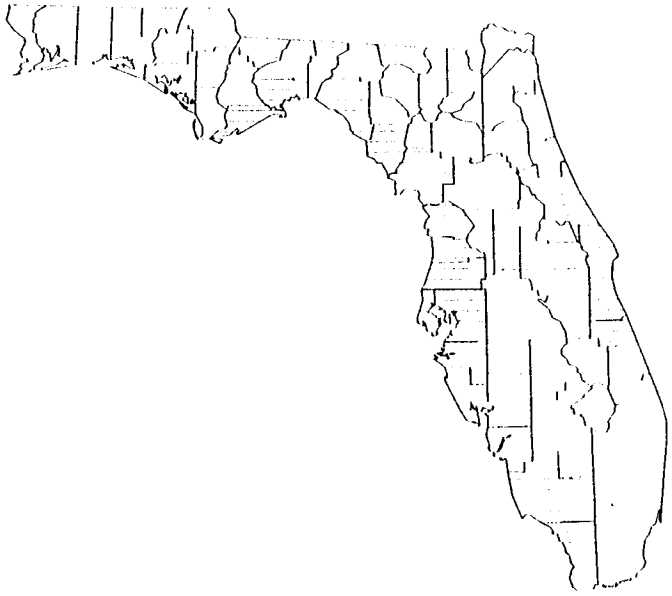
Figure 4b. Florida recreational landings of permit on the Gulf coast. Vertical bar indicates the range, upper and lower limits of the box are the 25th and 75th quartiles, and the horizontal bar is the median.

Figure 5. Geographical distribution of recreationally landed permit in Florida for 1994 and 1995. Legend: solid black - more than 100,000 fish; fine crosshatch - 50,001-100,000 fish; coarse crosshatch - 10,001-50,000 fish; horizontal lines - 1,001-10,000 fish; blank - less than 1,000 fish.

1994



1995



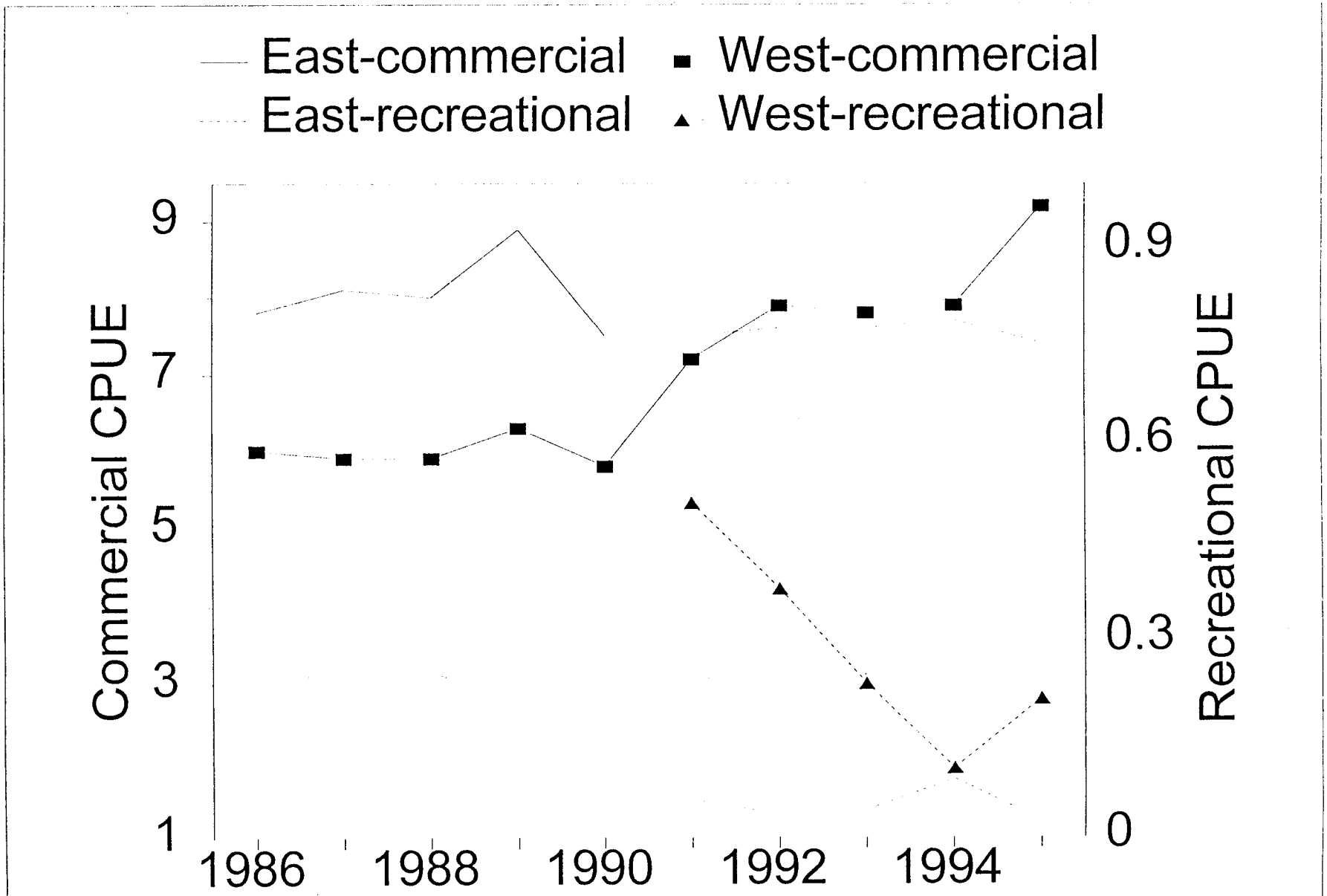


Figure 6. Catch-per-unit-effort (CPUE) in the commercial and recreational permit fisheries, east and west coast of Florida